

RECEIVED
DIVISION OF
WATER RESOURCES
ENFORCEMENT ELEMENT
MAR 10 1 06 PM '86

OF COUNSEL
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March 9, 1986

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STEVEN T. SINGER
DONALD J. CRECCA

MEMBER OF NY BAR
MEMBER OF FLA. BAR
MEMBER OF D.C. BAR
MEMBER OF CAL. BAR
MEMBER OF COLO. BAR

Mr. Joseph Mikulka, Chief
Department of Environmental Protection
Division of Water Resources
1259 Route 46 East
Parsippany-Troy Hills, NJ 07054

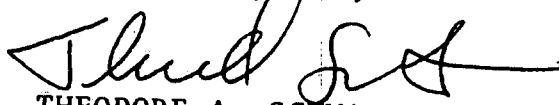
RE: L.E. Carpenter and Company
Administrative Consent Order

Dear Mr. Mikulka:

Enclosed please find a copy of the summary for the on-site activities during the month of February, 1986. The same is being filed in accordance with the above Administrative Consent Order.

Should you have any questions, please feel free to contact me at your earliest convenience.

Very truly yours,


THEODORE A. SCHWARTZ

TAS/mjp

Enclosure

cc: Mr. Robert G. Kunzel w/o enc.
Mr. Frank Aron w/o enc.

346942



GeoEngineering, Inc.

Consultants in Groundwater Control

March 4, 1986

100 Ford Rd. Denville, N.J. 07834 (201) 625 0700

L. E. Carpenter and Company
170 North Main Street
Wharton, NJ 07885

ATTN: Mr. Frank Aron

SUBJ: Monthly Progress Report
Groundwater Decontamination Program

Gentlemen:

This report summarized on-site activities during the month of February 1986.

The AUTO-SKIMMER was located at Well No. 10 for the entire month. A total of 27.4 gallons were recovered from Well No. 10. The total recovered since operations began is 2861.20 gallons.

Due to mechanical problems the AUTO-SKIMMER was out of service for the period February 18 to March 1, 1986

The attached Figures 1 and 2 show the piezometric water level contours and calculated thickness of solvent saturated soil on February 27, 1986. The contours of Figure 2 are derived from the measured thickness of solvent in individual wells. Because the AUTO-SKIMMER was not operating for a ten day period prior to the measurement, the contours approximate a static thickness of solvent saturated soil.

On January 24, 1986, five groundwater samples were collected and analyzed for volatile and base/neutral compounds. The complete chemical analysis results are enclosed for your review.

The foregoing is a condensed summary of activities for the month. Should further detail or any clarification be required, we shall respond promptly to your request.

Sincerely,

GEOENGINEERING, INC.



Robert S. Kunzel
Associate

RGK/avm
Enclosures
cc T. A. Schwartz, Esq. (2)

TABLE A
Solvent Thickness and Piezometric Elevations
on 04/29/86

<u>Well No.</u>	<u>Piezometric Surface Elevation</u>	<u>Measured Solvent (MW) Thickness (ft)</u>	<u>Calculated Solvent Thickness in Soil</u>
1	89.4 (1)	0.76	0.12
2	88.5 (1)	0.02	<0.01
3	88.4 (1)	0.95	0.15
4	88.8 (1)	0.01	<0.01
5	89.0 (1)	0.00	0.00
6	88.0 (2)	5.72	0.93
7	88.8 (2)	0.68	0.11
8	88.4	0.05	<0.01
9	89.5	0.00	0.00
10	88.7 (2)	0.42	0.07
Drainage Channel	85.8		
River	MP #1 89.5		
	MP #2 88.6		
	MP #3 87.1		

(1) Depth to water measured inside the GEOMON Groundwater Sampler/Piezometer (inlet screen is below solvent level).

(2) Calculated piezometric surface, assuming solvent S.G. = 0.87.



INDUSTRIAL
CORROSION
MANAGEMENT
INCORPORATED

1152 ROUTE 10, RANDOLPH, NEW JERSEY 07869 201-584-0330

State Certified Drinking Water/Wastewater
Laboratory ID #14116

REPORT DATE: February 19, 1986

LAB # 51520

SAMPLE SOURCE: GEO ENGINEERING - MONITORING WELL # 5

SAMPLE DATE: January 24, 1986

TAKEN BY: K. VanOrden

AT LAB DATE: 1/24/86

Analysis

Results

BUTYL BENZENE	<u>ND</u>
CUMENE.....	<u>ND</u>
DECANE.....	<u>ND</u>
MESITYLENE (1,3,5 TRIMETHYLBENZENE)...	<u>ND</u>
STYRENE.....	<u>ND</u>


Nothing Detected at a sensitivity of 1 ug/l(ppb)

LT=Less than
ND=Nothing Detected

SURROGATE RECOVERIES:

BFB - 85%
d₈ toluene - 86%

INDUSTRIAL CORROSION MANAGEMENT, INC.


Richard S. Levine
President

RSL:dlh
encl.



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INCORPORATED**

1152 ROUTE 10, RANDOLPH, NEW JERSEY 07869 201-584-0330

NJDEP Certified Drinking Water/Wastewater
Laboratory ID# 14116

REPORT DATE: February 19, 1986

LAB # 51520

VOLATILE ORGANICS BY PURGE AND TRAP GAS CHROMATOGRAPHY

XYLENE

CLIENT: GEO ENGINEERING

SAMPLE SOURCE: Monitoring Well #5

SAMPLE DATE: January 24, 1986

TAKEN BY: K. VanOrden

AT LAB DATE: January 24, 1986

Compounds detected in parts per billion(micrograms/liter)

CHLOROMETHANE	ND
BROMOMETHANE	ND
DICHLORODIFLUOROMETHANE	ND
VINYL CHLORIDE	ND
CHLOROETHANE	ND
METHYLENE CHLORIDE	ND
ACETONE	ND
TRICHLOROFLUOROMETHANE	ND
1,1-DICHLOROETHYLENE	ND
1,1-DICHLOROETHANE**	ND
t-1,2-DICHLOROETHYLENE	ND
CHLOROFORM	ND
FREON 113	ND
1,2-DICHLOROETHANE	ND
t-BUTYL METHYL ETHER	ND
1,1,1-TRICHLOROETHANE	ND
CARBON TETRACHLORIDE	ND
BROMODICHLOROMETHANE	ND

1,2-DICHLOROPROPANE	ND
c-1,3-DICHLOROPROPENE*	ND
t-1,3-DICHLOROPROPENE*	ND
TCE (TRICHLOROETHYLENE)	ND
1,1,2-TRICHLOROETHANE*	ND
DIBROMOCHLOROMETHANE*	ND
BENZENE	ND
DIISOPROPYL ETHER	ND
2-CHLOROETHYL VINYL ETHER	ND
HEXANE	ND
BROMOFORM	ND
1,1,2,2-TETRACHLOROETHANE	ND
PCE (TETRACHLOROETHYLENE)	ND
HEPTANE*	ND
TOLUENE*	ND
CHLOROBENZENE	ND
ETHYLBENZENE	ND
M-XYLENE	ND
O-XYLENE	ND
P-XYLENE	ND

X For the above listed volatile pollutants, nothing detected at 5 ug/l(ppb).
Unknown peaks detected(Retention time, estimated amount)

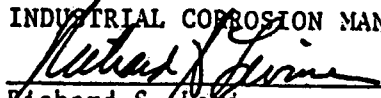
LT=Less Than, GT=Greater Than, ND=Not Detected.

*Compounds elute together. Could be either material

NOTE: Compound identification is based upon retention time matches with specific known standards. Confirmatory analysis using GC/MS is required to positively identify any materials and/or amounts detected.

**Tetrahydrofuran & Phosgene also elute at this point.
Numerical results are calculated for 1,1-Dichloroethane

INDUSTRIAL CORROSION MANAGEMENT, INC.


Richard S. Levine
President

RSL:

**ICM INDUSTRIAL
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INCORPORATED**

1152 ROUTE 10, RANDOLPH, NEW JERSEY 07869 201-584-0330

State Certified Drinking Water/Wastewater
Laboratory ID #14116

REPORT DATE: February 19, 1986

LAB # 51519

SAMPLE SOURCE: GEO ENGINEERING - MONITORING WELL # 4

SAMPLE DATE: January 24, 1986 TAKEN BY: K. VanOrden AT LAB DATE: 1/24/86

Analysis

Results

BUTYL BENZENE	<u>ND</u>
CUMENE	<u>ND</u>
DECANE	<u>ND</u>
MESITYLENE (1,3,5 TRIMETHYLBENZENE)...	<u>ND</u>
STYRENE	<u>ND</u>

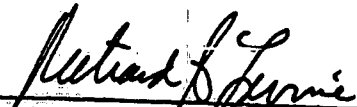
Nothing Detected at a sensitivity of 1 ug/l(ppb).

LT=Less than
ND=Nothing Detected

SURROGATE RECOVERIES:

d₈ toluene - 86%
BFB - 66%

INDUSTRIAL CORROSION MANAGEMENT, INC.


Richard S. Levine
President

RSL:dlh
encl.

REPORT DATE: February 19, 1986

LAB # 51519

VOLATILE ORGANICS BY PURGE AND TRAP GAS CHROMATOGRAPHY

CLIENT: GEO ENGINEERING

XYLENE

SAMPLE DATE: January 24, 1986

TAKEN BY: Ken VanOrden

SAMPLE SOURCE: Monitoring Well #4

AT LAB DATE: January 24, 1986

Compounds detected in parts per billion(micrograms/liter)

CHLOROMETHANE	ND	1,2-DICHLOROPROPANE	ND
BROMOMETHANE	ND	c-1,3-DICHLOROPROPENE*	ND
DICHLORODIFLUOROMETHANE	ND	t-1,3-DICHLOROPROPENE*	ND
VINYL CHLORIDE	ND	TCE (TRICHLOROETHYLENE)	ND
CHLOROETHANE	ND	1,1,2-TRICHLOROETHANE*	ND
METHYLENE CHLORIDE	ND	DIBROMOCHLOROMETHANE*	ND
ACETONE	ND	BENZENE	ND
TRICHLOROFLUOROMETHANE	ND	DIISOPROPYL ETHER	ND
1,1-DICHLOROETHYLENE	ND	2-CHLOROETHYL VINYL ETHER	ND
1,1-DICHLOROETHANE**	ND	HEXANE	ND
t-1,2-DICHLOROETHYLENE	ND	BROMOFORM	ND
CHLOROFORM	ND	1,1,2,2-TETRACHLOROETHANE	ND
FREON 113	ND	PCE (TETRACHLOROETHYLENE)	ND
1,2-DICHLOROETHANE	ND	HEPTANE*	ND
t-BUTYL METHYL ETHER	ND	TOLUENE*	ND
1,1,1-TRICHLOROETHANE	ND	CHLOROBENZENE	ND
CARBON TETRACHLORIDE	ND	ETHYLBENZENE	ND
BROMODICHLOROMETHANE	ND	M-XYLENE	ND
		O-XYLENE	ND
		P-XYLENE	ND

Surrogate Recovery - 103%

X For the above listed volatile pollutants, nothing detected at 1 ug/l(ppb).
Unknown peaks detected(Retention time, estimated amount)

LT=Less Than, GT=Greater Than, ND=Not Detected.
*Compounds elute together. Could be either material

NOTE: Compound identification is based upon retention time matches with specific known standards. Confirmatory analysis using GC/MS is required to positively identify any materials and/or amounts detected.

**Tetrahydrofuran & Phosgene also elute at this point.
Numerical results are calculated for 1,1-Dichloroethane on

INDUSTRIAL CORROSION MANAGEMENT, INC.
Richard S. Levine
President



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State Certified Drinking Water/Wastewater
Laboratory ID #14116

REPORT DATE: February 19, 1986

LAB # 51518

SAMPLE SOURCE: GEO ENGINEERING - MONITORING WELL # 3

SAMPLE DATE: January 24, 1986 TAKEN BY: K. VanOrden AT LAB DATE: 1/24/86

Analysis

Results

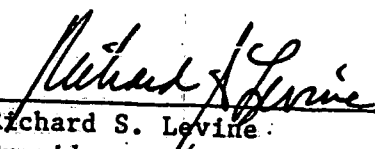
BUTYL BENZENE	<u>ND</u>
CUMENE.....	<u>ND</u>
DECANE.....	<u>ND</u>
MESITYLENE (1,3,5 TRIMETHYLBENZENE)...	<u>30 ug/l(ppb)</u>
STYRENE.....	<u>ND</u>
other benzene derivatives - 22 ug/l(ppb)	
Nothing Detected at a sensitivity of _____	

LT=Less than
ND=Nothing Detected

SURROGATE RECOVERIES:

d₈ toluene - 88%
BFB - 86%

INDUSTRIAL CORROSION MANAGEMENT, INC.


Richard S. Levine
President

RSL:dlh
encl.

VOLATILE ORGANICS BY PURGE AND TRAP GAS CHROMATOGRAPHY

XYLENE

CLIENT: GEO ENGINEERING

SAMPLE SOURCE: Monitoring Well #3

SAMPLE DATE: January 24, 1986

TAKEN BY: Ken VanOrden

AT LAB DATE: January 24, 1986

Compounds detected in parts per billion(micrograms/liter)

CHLOROMETHANE -----	ND	1,2-DICHLOROPROPANE -----	ND
BROMOMETHANE -----	ND	c-1,3-DICHLOROPROPENE* -----	ND
DICHLORODIFLUOROMETHANE -----	ND	t-1,3-DICHLOROPROPENE* -----	ND
VINYL CHLORIDE -----	ND	TCE (TRICHLOROETHYLENE) -----	ND
CHLOROETHANE -----	ND	1,1,2-TRICHLOROETHANE* -----	ND
METHYLENE CHLORIDE -----	ND	DIBROMOCHLOROMETHANE* -----	ND
ACETONE -----	ND	BENZENE -----	ND
TRICHLOROFLUOROMETHANE -----	ND	DIISOPROPYL ETHER -----	ND
1,1-DICHLOROETHYLENE -----	ND	2-CHLOROETHYL VINYL ETHER -----	ND
1,1-DICHLOROETHANE** -----	ND	HEXANE -----	ND
t-1,2-DICHLOROETHYLENE -----	ND	BROMOFORM -----	ND
CHLOROFORM -----	ND	1,1,2,2-TETRACHLOROETHANE -----	ND
FREON 113 -----	ND	PCE (TETRACHLOROETHYLENE) -----	ND
1,2-DICHLOROETHANE -----	ND	HEPTANE* -----	ND
t-BUTYL METHYL ETHER -----	ND	TOLUENE* -----	ND
1,1,1-TRICHLOROETHANE -----	ND	CHLOROBENZENE -----	ND
CARBON TETRACHLORIDE -----	ND	ETHYLBENZENE -----	ND
BROMODICHLOROMETHANE -----	ND	M-XYLENE -----	19
		O-XYLENE -----	
		P-XYLENE -----	12

Surrogate Recovery - 89%

For the above listed volatile pollutants, nothing detected at
Unknown peaks detected(Retention time, estimated amount)

LT=Less Than, GT=Greater Than, ND=Not Detected.

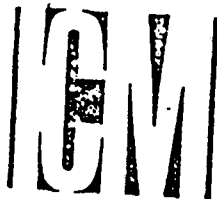
*Compounds elute together. Could be either material

NOTE: Compound identification is based upon retention time matches with specific known standards. Confirmatory analysis using GC/MS is required to positively identify any materials and/or amounts detected.

**Tetrahydrofuran & Phosgene also elute at this point.
Numerical results are calculated for 1,1-Dichloroethane c:

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Richard S. Levine
Richard S. Levine
President



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1152 ROUTE 10, RANDOLPH, NEW JERSEY 07869 201-584-0330

State Certified Drinking Water/Wastewater
Laboratory ID #14116

REPORT DATE: February 19, 1986

LAB # 51517

SAMPLE SOURCE: GEO ENGINEERING - MONITORING WELL # 2

SAMPLE DATE: January 24, 1986 TAKEN BY: Ken VanOrden AT LAB DATE: 1/24/86

Analysis

Results

BUTYL BENZENE	<u>ND</u>
CUMENE.....	<u>ND</u>
DECANE.....	<u>ND</u>
MESITYLENE (1,3,5 TRIMETHYLBENZENE)...	<u>ND</u>
STYRENE.....	<u>ND</u>

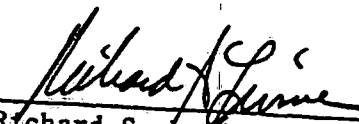
Nothing Detected at a sensitivity of 1 ug/l(ppb)

LT=Less than
ND=Nothing Detected

SURROGATE RECOVERIES:

d₈ toluene - 86%
BFB - 98%

INDUSTRIAL CORROSION MANAGEMENT, INC.


Richard S. Levine
President

RSL:dlh
encl.

REPORT DATE: February 19, 1986

LAB # 51517

VOLATILE ORGANICS BY PURGE AND TRAP GAS CHROMATOGRAPHY

XYLENE

CLIENT: GEO ENGINEERING

SAMPLE SOURCE: Monitoring Well #2

SAMPLE DATE: January 24, 1986

TAKEN BY: Ken VanOrden

AT LAB DATE: January 24, 1986

Compounds detected in parts per billion(micrograms/liter)

CHLOROMETHANE	ND	1,2-DICHLOROPROPANE	ND
BROMOMETHANE	ND	c-1,3-DICHLOROPROPENE*	ND
DICHLORODIFLUOROMETHANE	ND	t-1,3-DICHLOROPROPENE*	ND
VINYL CHLORIDE	ND	TCE (TRICHLOROETHYLENE)	ND
CHLOROETHANE	ND	1,1,2-TRICHLOROETHANE*	ND
METHYLENE CHLORIDE	ND	DIBROMOCHLOROMETHANE*	ND
ACETONE	ND	BENZENE	ND
TRICHLOROFLUOROMETHANE	ND	DIISOPROPYL ETHER	ND
1,1-DICHLOROETHYLENE	ND	2-CHLOROETHYL VINYL ETHER	ND
1,1-DICHLOROETHANE**	ND	HEXANE	ND
t-1,2-DICHLOROETHYLENE	ND	BROMOFORM	ND
CHLOROFORM	ND	1,1,2,2-TETRACHLOROETHANE	ND
FREON 113	ND	PCE (TETRACHLOROETHYLENE)	ND
1,2-DICHLOROETHANE	ND	HEPTANE*	ND
t-BUTYL METHYL ETHER	ND	TOLUENE*	ND
1,1,1-TRICHLOROETHANE	ND	CHLOROBENZENE	ND
CARBON TETRACHLORIDE	ND	ETHYLBENZENE	ND
BROMODICHLOROMETHANE	ND	M-XYLENE	ND
		O-XYLENE	ND
		P-XYLENE	ND

Surrogate Recovery - 93%

☒ For the above listed volatile pollutants, nothing detected at 1 ug/l(ppb).
☐ Unknown peaks detected(Retention time, estimated amount)

LT=Less Than, GT=Greater Than, ND=Not Detected.

*Compounds elute together. Could be either material

NOTE: Compound identification is based upon retention time matches with specific known standards. Confirmatory analysis using GC/MS is required to positively identify any materials and/or amounts detected.

**Tetrahydrofuran & Phosgene also elute at this point.
Numerical results are calculated for 1,1-Dichloroethane

INDUSTRIAL CORROSION MANAGEMENT, INC.

Richard S. Levine
Richard S. Levine
President

RSL: dlh



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INCORPORATED**

1152 ROUTE 10, RANDOLPH, NEW JERSEY 07869 201-584-0330

State Certified Drinking Water/Wastewater
Laboratory ID #14116

REPORT DATE: February 19, 1986

LAB # 51516

SAMPLE SOURCE: GEO ENGINEERING - MONITORING WELL # 1

SAMPLE DATE: January 24, 1986 TAKEN BY: K. VanOrden AT LAB DATE: 1/24/86

Analysis

Results

BUTYL BENZENE	<u>ND</u>
CUMENE.....	<u>ND</u>
DECANE.....	<u>ND</u>
MESITYLENE (1,3,5 TRIMETHYLBENZENE)...	<u>ND</u>
STYRENE.....	<u>ND</u>


Nothing Detected at a sensitivity of 2,000 ug/l(ppb).

LT=Less than
ND=Nothing Detected

SURROGATE RECOVERIES:

d₈ toluene - 139%
BFB - 127%

INDUSTRIAL CORROSION MANAGEMENT, INC.


Richard S. Levine
President

RSL:dlh
encl.

REPORT DATE: February 19, 1986

LAB # 51516

VOLATILE ORGANICS BY PURGE AND TRAP GAS CHROMATOGRAPHY

XYLENE

CLIENT: GEO ENGINEERING

SAMPLE SOURCE: Monitoring Well #1

SAMPLE DATE: January 24, 1986

TAKEN BY: Kenneth VanOrden

AT LAB DATE: January 24, 1986

Compounds detected in parts per billion(micrograms/liter)

CHLOROMETHANE	ND
BROMOMETHANE	ND
DICHLORODIFLUOROMETHANE	ND
VINYL CHLORIDE	ND
CHLOROETHANE	ND
METHYLENE CHLORIDE	ND
ACETONE	ND
TRICHLOROFLUOROMETHANE	ND
1,1-DICHLOROETHYLENE	ND
1,1-DICHLOROETHANE**	ND
t-1,2-DICHLOROETHYLENE	ND
CHLOROFORM	ND
FREON 113	ND
1,2-DICHLOROETHANE	ND
t-BUTYL METHYL ETHER	ND
1,1,1-TRICHLOROETHANE	ND
CARBON TETRACHLORIDE	ND
BROMODICHLOROMETHANE	ND

Surrogate Recovery - 95%

1,2-DICHLOROPROPANE	ND
c-1,3-DICHLOROPROPENE*	ND
t-1,3-DICHLOROPROPENE*	ND
TCE (TRICHLOROETHYLENE)	ND
1,1,2-TRICHLOROETHANE*	ND
DIBROMOCHLOROMETHANE*	ND
BENZENE	ND
DIISOPROPYL ETHER	ND
2-CHLOROETHYL VINYL ETHER	ND
HEXANE	ND
BROMOFORM	ND
1,1,2,2-TETRACHLOROETHANE	ND
PCE (TETRACHLOROETHYLENE)	ND
HEPTANE*	ND
TOLUENE*	130
CHLOROBENZENE	ND
ETHYLBENZENE	3,000
M-XYLENE	59,000
O-XYLENE	43,000
P-XYLENE	43,000

For the above listed volatile pollutants, nothing detected at
Unknown peaks detected(Retention time, estimated amount)

LT=Less Than, GT=Greater Than, ND=Not Detected.

*Compounds elute together. Could be either material

NOTE: Compound identification is based upon retention time matches with specific known standards. Confirmatory analysis using GC/MS is required to positively identify any materials and/or amounts detected.

**Tetrahydrofuran & Phosgene also elute at this point.
Numerical results are calculated for 1,1-Dichloroethane o:

INDUSTRIAL CORROSION MANAGEMENT, INC.

Richard S. Levine
Richard S. Levine
President